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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/655,340

09/04/2003

Grigori Lishanski

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EXAMINER

WEINSTEIN, LEONARD J

ART UNIT

PAPER NUMBER

3746

NOTIFICATION DATE

DELIVERY MODE

11/10/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@boylefred.com

Office Action Summary	Application No. 10/655,340	Applicant(s) LISHANSKI ET AL.	
	Examiner LEONARD J. WEINSTEIN	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14 and 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment of August 13, 2008. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.
2. The examiner acknowledges the amendments to claims 1, 2, 11, 17, 18, and 20. The examiner notes that claims 13 and 15 have been canceled.
3. Claim 1 objected to because of the following informalities: the recitation of "space though an inlet" in lines 7 and 8 will be considered to be --- space through an inlet--- for the purposes of the office action on the merits. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 1-12, 14, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claim 1 recites the limitation "the vibration generating means" in line 13. As best understood by the examiner and for the purposes of the office action on the merits that follows "the vibration generating means" will be considered to be --- vibration generating mechanism --- as this element was introduced proceeding the cited recitation in claim 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1, 2, 6-9, 11, 12, 14, 16, 17, and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Lishanski et al. US 6,428,289 in view of Nottingham et al. US 5,716,007. Lishanski teaches all the limitations as claimed for a vibratory pump including: **[claims 1, 17 (in part), and 20 (in total)]** a rigid (unitary - with reference for **claim 17**) housing (as defined by elements 20, 30, 40, 160, 180, and 190) a vibration generating mechanism (80, 90, 100, 120, and 140) disposed within the housing (within element 20 of housing defined by 20, 30, and 180), a rigid pumping chamber 40 disposed within the housing (20, 30, 40, 180, 190) adjacent the vibration generating mechanism (80, 90, 100, 120, and 140) and defining an enclosed interior space 200, the rigid pumping chamber 40 including a fluid for **claim 17**) to move in direct correspondence to the oscillation of the vibration generating mechanism (80, 90, 100,

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120, and 140) and positioned within the pumping chamber 40 at the opposite end, the opposite end (160 of 130) selectively and directly engageable with the fluid outlet (via 200 of 200, 210, 220, 230, 240, 250, and 255) during operation of the vibration generating mechanism (80, 90, 100, 120, and 140)—(and the opposite end (160 of 130) extending at least partially through and selectively engageable with the fluid outlet (200, 210, 220, 230, 240, 250, and 255) during operation of the vibration generating mechanism (80, 90, 100, 120, and 140) as the crown of element 150 comes into abutment with element 250 and partially extends into element 200- with reference for **claim 17**); **[claims 2 and 17 in part]** an enclosed outlet chamber 220 defining an enclosed inner space and having an inner end (as defined by element 250) positioned within the pumping chamber 40 and including a central opening 200, and an outer end 230 extending outwardly from the enclosed interior space 220 extending from the pumping chamber 40; **[claim 6]** an inner end (as defined by element 250) includes a resilient diaphragm 250 positioned over the central opening 200, the diaphragm 250 including a central aperture 260; **[claim 7]** a rod 130 includes a plate 150, as defined by the flat surface of element 150 facing element 30, opposite the vibration generating mechanism (80, 90, 100, 120, and 140) that is engageable with the central opening 160; **[claim 8]** a plate 150 is positioned with the outlet end, as a portion of the crown of plate element 150 extends through 250 and into element 200 ; **[claim 9]** a plate 150 includes a central portion (as at least a portion of the crown of the semicircular plate 150 will fit into element 260) in having a diameter less than the diameter of the central opening 260 and an outer portion (outer portion of the semicircular plate formed by element 150 near

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its edges) having a diameter greater than the diameter of the central opening 260;

[claim 16] and wherein the vibration generating mechanism (80, 90, 100, 120, and 140) includes a switch (as defined by elements 50, 60, 70) extending through the housing (80, 30, 40, 180, 190), as aperture element 75 enables elements 50, 60, and 70 to be in electrical communication with element 140).

Lishanski does not teach the following limitations that are taught by Nottingham for a pump including: **[claims 1, 17, and 20]** a fluid inlet 76 extending through a housing 32, the one fluid inlet 76 communicating with an interior space (as defined by element 40) through an inlet opening 78 in the pumping chamber 40 and extending outwardly from the pumping chamber 40, as shown in figure 4, the at least one fluid inlet 76 adapted to be inserted into a fluid, as held within element 18 of element 16, to be pumped to draw the fluid into the pumping chamber 40 within the housing 32; **[claim 11]** the at least one fluid inlet 76 is formed as at least one inlet tube 80 that extends outwardly from the pumping chamber 40, as shown in figure 4; **[claim 12]** one inlet tube 80 is formed from a generally resilient material (plastic tube of element 76); **[claim 14]** a housing 32 includes an engagement member 54 disposed on the housing 32 that is engageable with a fluid-holding container 16. A combination of Lishanski and Nottingham would provide a fluid inlet that extends from housing (as defined by elements 20, 30, 40, 160, 180, and 190) forming a pump chamber 40 as taught by Lishanski into a housing 16 that provides a fluid reservoir mounted on to a pumping assembly, as taught by Nottingham with elements 16 and 12 respectively. It would have been obvious to one having ordinary skill in the art at the time the invention was

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made to modify a vibratory pump, as taught by Lishanski, to have a fluid inlet extending from a pump chamber into a fluid reservoir, as taught by Lishanski, in order to provide a fluid inlet that extends into a fluid container mounted to a pump assembly that can be easily removed so that another container with a possibly different fluid can be attached and thereby pumped the pumping assembly (Nottingham – col. 1 ll. 51-67).

10. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lishanski et al. US 6,428,289 in view of Nottingham et al. US 5,716,007. A combination of Lishanski and Nottingham teaches the limitations as discussed including (with reference to Lishanski: **[claim 4]** a plate 150 opposite the vibration generating mechanism (90, 90, 100, 110, 120, and 140) that is matable with the central opening; **[claim 5]** and a plate 150, as defined by the flat surface of element 150 facing element 30, is formed of a resilient material (Lishanski – col. 1 ll. 66 - col. 2 ll. 2). A combination of the references fails to teach **[claim 3]** a central opening of an inner end of an outlet chamber positioned within the enclosed interior space within a pumping chamber having a conical surface. It would have been obvious to one having ordinary skill in the art at the time the invention as made to modify a central opening for an outlet chamber, as taught by Lishanski, from normal aperture with a flat circumference forming an inner wall to a conical surface. Such modification would be an immaterial change in shape of an opening to an outlet chamber. A change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results. *In re Dailey et al.*, 149 USPQ 47. A Change in aesthetic (ornamental) design generally will not support patentability. *In re Seid*, 73 USPQ 431.

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11. Claim 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lishanski et al. US 6,428,289 in view of Nottingham et al. US 5,716,007, as applied to claim 17 above, and further in view of Silvenis et al. US 5,150,841. A combination of the references teaches all the limitations as claimed but does not teach the following limitations that are taught by Silvenis for a pump including: **[claim 18]** an inner end of an outlet chamber 39 includes a resilient gasket 207 positioned over an opening 215, the gasket 207 including a central aperture, so as to accommodate element 205, through which a plunger 209 completely extends; **[claim 19]** and plunger 209 includes a plate, as defined by the portion of element 209 above element 207, opposite a vibration generating mechanism 37 that is matable with a central aperture, so as to accommodate element 205, in the resilient gasket 207. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a vibratory pump, as taught by Lishanski, modified to have inlet extending from a pumping chamber into a fluid reservoir, as taught by Nottingham, further modified to have a plunger engaged with a central aperture, as taught by Silvenis, in order to enable a pump to operate at pump at low pressure levels while at a low power level (Silvenis - col. 1 ll. 65-67).

Allowable Subject Matter

12. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD J. WEINSTEIN whose telephone number is (571)272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/
Supervisory Patent Examiner, Art
Unit 3746

/Leonard J Weinstein/
Examiner, Art Unit 3746